PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of STEFAN J. RUBLOWSKY, et al. Application No. 10/668,058 Filed: September 19, 2003 For: ADHESIVE BINDER STRIPS HAVING REDUCED TRANSVERSE CURL AND METHOD	Group Art Unit: 1772 Examiner: Loney, Donald J. **DECLARATION OF EUGENE ANDERSON PURSUANT TO RULE 132** 400 Montgomery Street, Suite 1110 San Francisco, CA 94104 (415) 433-2250

My name is Eugene Anderson and I hereby declare as follows:

(1) I am an employee of Powis Parker Inc, which is the owner of the above-captioned application;

(2) I am one of the named co-inventors in the subject Application.

(3) I have been working in the field of binder strip design and manufacture for over 17 years. I carried out and supervised much of the development work and testing of the improved binder strip design which is the subject of the present Application. I believe that I posses at least an average amount of skill in the field of adhesive binder strip design and manufacture.

(4) In order to assist in responding to a Patent Office Action dated May 31, 2006 in connection with the subject Application, I recently supervised and participated in the preparation of binder strips in the following three categories:

(a) binder strips having no mechanical deformations in the heat-activated adhesive;

(b) binder strips having mechanical deformations that were introduced during the manufacturing process at the time the molten heat-activated adhesive was applied to the binder strip substrate;

(c) binder strips having mechanical deformations similar to those of category (b), but which were made in the heat-activated adhesive after the adhesive was applied to the binder strip substrate and had an opportunity to cool.

(5) Accompanying this Declaration are five samples each of the three categories of binder strips. The binder strips of category (a) exhibited substantial transverse curl as described in the subject application, with the binder strips of category (b) exhibiting no significant reduction in curl relative to the category (a) strips. The category (c) strips exhibited substantially reduced curl. Note that these results are consistent with the extensive testing carried out and supervised by me during the development of the binder strips disclosed and claimed in the present Application. I also confirm that the statements made in the present Application regarding the performance of the subject reduced curl binder strips are correct and further reconfirm the statements made in the Declaration for Patent Application I signed on January 16, 2004.

(6) The geometry or shape of the mechanical deformations in the category (b) and (c) binder strips were intended to be the same but are not identical. However, based upon my previously noted experience in binder strip design and, in particular, in the design and development of the reduced curl binder strips of the present Application, I do not believe that any significant difference in curl reduction is attributable to any difference in the geometry of the mechanical deformations of the category (b) and (c) binder strips. Rather, I believe that the difference in curl reduction is attributable to whether the mechanical deformations were introduced while the adhesive is still molten as in category (b) or after the adhesive has cooled as in category (c).

(7) The difference in the manufacture of the binder strips of category (b) and (c) results in substantially different performance with respect to curl reduction, with that difference in performance being attributable to the structural differences between the respective adhesive layers. Although I am not certain of the exact nature of the structural differences, it is likely that the structural differences relate to differences in the mechanical stresses present on the surface and in the body of the respective adhesive layers.

(8) Note that the binder strips of categories (a) and (b), when compressed during shipping, storage and the like, will temporarily loose all or part of the curl. However, when the compressing force is removed, the curl returns to the strip. The purpose of the container containing the binder strip samples is to reduce the likelihood that the category (a) and (b) strips will become compressed during shipping or storage. If, for example, the strips are removed from the container and placed between sheets of a file, the category (a) and (b) strips may temporarily loose part of their curl, but this curl will return after passage of time.

(9) I have reviewed USPNo. 4,471,976 to Giulie. It is apparent to me that the valleys 17 formed in the adhesive 14 are for the sole purpose of facilitating the folding of the adhesive as shown in Fig. 3. The fact that a score line or the like is located in the backing 19/24 directly opposite each valley reinforces this belief.

(10) I also my belief that the adhesive section 14 of Giulie was applied in molten form using an extrusion device having a suitable cross-section to form the peaks 16 and valleys 17 (Figs. 3 and 4 of Giulie) as the molten adhesive is deposited on to the substrate. The following is the reason for this belief:

(a) An extrusion device is invariably used by my employer Powis Parker Inc. during the manufacture of binder strip products such as the binder strips shown if Figs. 1A and B of the present application. Adhesive layers 24, 26A and 26B are each applied in molten form using a suitably shaped extrusion die. I am not aware of any other practical way of applying molten adhesives in the manufacture of binder strips or any other similar applications. An example of the use of an extrusion die is specifically cited in USPNo. 4,371,195 to Wang et al. mentioned below where reference is made to a "conventional hot melt extrusion orifice".

(b) Although it would be possible to first lay down adhesive 14 of Giulie using a rectangular-shaped extrusion die, I do not believe that is the case. If that were the case, it would then be necessary to form the peaks 16 and valleys 17 in the adhesive. Given the depicted profile of the peaks and valleys, I think it is very unlikely that the valleys 17 were formed after cooling using a cutting roller of the like given the large volume of adhesive that would have to be displaced to form the valleys. This would unnecessarily turn a one step process (a process using a suitably shaped extrusion die) into a two step process. Such a two

step process would needlessly complicate the manufacturing process and increase manufacturing costs and would not be adopted in my view.

(11) I have also reviewed USPNo. 4,800,110 to DuCorday. DuCorday shows heat activated-adhesive 26 in Fig. 1 which includes, according to the patent, "beads 28, 30 and 32 separated by "grooves" 34 and 36, with "connecting sections" 40 and 42 of adhesive being formed below each of the grooves. The "grooves" are provided for the purpose of permitting the individual adhesive "beads" 28, 30 and 32 to be manually removed or torn away to accommodate the binding of stacks of differing thickness. The grooves 34/36 also facilitate folding of the spine section 16 around the edge of the stack to be bound as indicated by the somewhat rounded spine section shown in Figs. 2, 3 and 5. The reference to "side-by-side glue beads 28, 30, 32, separated from one another by V-shaped grooves" at column 2, lines 64 – 67 leads me to believe that the grooves 34 and 36 were formed as the adhesive was laid down in molten form. That is because the phrase "glue beads" in the field of adhesive technology means a volume of adhesive applied in molten form. Thus, I believe that the "beads" 28, 30, 32 and the intermediate grooves 34 and 36 were formed using an extrusion process.

(12) I have also reviewed USPNo. 4,371,195 to Wang et al. This patent shows "cover strips" 23 and 24 of heat activated adhesive which are connected to a center strip 21 by way of narrow adhesive ribs 23a and 24a which are separated by respective gaps 23b and 24b formed in the adhesive. As described in Wang et al , the function of the cover strips 23 and 24 of adhesive is to secure those sheets to be bound that are disposed near the two score lines 20 which separate the "backbone " 17 from the front and back covers 18 and 19. The thinness of the adhesive ribs 23a and 24a, which extend over the respective score lines 20, was said to facilitate folding (Col. 4, line 24 et seq.). The discussion starting at Col. 4, line 65 and ending at Col 5, line 11 states that the intricate adhesive pattern of cover strips 23 and 24, referred to as a "chattered configuration may be obtained by varying the flow of hot melt adhesive onto the cover through a conventional hot melt extrusion orifice ... ," This confirms my belief that the cover strips 23 and 24 and ribs 23a and 23b were applied in molten form. Further, given the location of the ribs 23a and 24a at only the extreme outer edges of the center adhesive strip 21, I do not believe that the presence of the ribs and gaps would have any significant

effect on transverse curl reduction, regardless of whether or not the ribs and gaps are formed before or after adhesive cooling.

(13) As the person signing below:

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment or both, under 18 U.S.C. § 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Dated: Nov. 28, 2006 By: Eugene Anderson

EUGENE ANDERSON

Attorney Docket No. PRKR-4500